

State of Montana

Strategic Plan for Information Technology

2010

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This is the fifth State of Montana Strategic Plan for Information Technology prepared under the authority of the Montana Information Technology Act of 2001. It is published biennially unless special interim plans become necessary.

INFORMATION TECHNOLOGY SERVICES DIVISION

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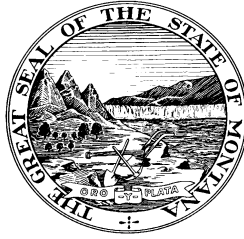
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STATE OF MONTANA

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Fellow Montanans:

Information Technology (IT) plays an increasingly significant role in all our lives, at home, at work, at our kids' school and as we travel for business or leisure. Our children cannot imagine life without the Internet, cell phones, and instant messaging.

Likewise, for Montana state government employees, it is impossible to envision working without our current IT services. IT is a fundamental and necessary tool for delivering essential services to Montana's citizens and for carrying out an agency's mission and daily operations.

Please use the Strategic Plan before you as a guide through the complex issues and challenges that are part of effectively managing IT. The ability to meet the expectations of Montana citizens for useful e-government and other time and labor saving services with reasonable investment and manageable risk is crucial to the success of state government.

The State of Montana Strategic Plan for Information Technology provides direction to state leaders and agencies to ensure IT efforts are coordinated. The plan's goals and objectives will be reached through the strong federal, state, local and private sector partnership upon which it is built.

I am grateful for the assistance of advisory groups and state staff that developed this plan and am confident you will find it informative.

Sincerely,

-DRAFT-

BRIAN SCHWEITZER
Governor

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State of Montana Strategic Plan for Information Technology

INTRODUCTION

The State of Montana Strategic Plan for Information Technology (Strategic Plan) serves as the voice of the Montana Information Technology Act (MITA), found in Title 2 Chapter 17 Part 5 MCA, and documents the strategies of the State Chief Information Officer (CIO). This Plan is reviewed every two years to identify the goals that will be emphasized. It provides the framework and guidance for state agencies to develop their individual plans for the use of information technology resources. The State IT Strategic Plan also provides accountability to the governor, the legislature, and the citizens of Montana.

This year's Strategic Plan incorporates some new goals and objectives that were not in the 2008 Plan. Goal 1 recognizes the need to involve communities of interest that have similar or related business objectives in IT strategic planning in order to develop IT resources in an effective and efficient manner, and provide stable funding for long-term, enterprise-wide IT investments. Goal 2 acknowledges the advantages of implementing common business applications and shared services across governmental units to achieve economies-of-scale and to minimize unnecessary duplication, especially in the areas of security, records management, and new eGovernment and Geographic IT (GIS) Services.

Goals 3 and 4 are from the previous plan. Those goals and objectives continue to be important to the state, and while progress has been made in these areas, we still have a ways to go before identifying them as having been completed. Goal 3 recognizes the continued need to create quality jobs and a favorable business climate through further expansion of Montana's SummitNet Network. Goal 4 acknowledges the continued importance to protect individual privacy and the privacy of information contained within IT systems.

The IT goals and objectives are valid and relevant to the future direction of IT for the state of Montana.

-DRAFT-

Dick Clark, Montana State CIO.

MONTANA'S INFORMATION TECHNOLOGY VISION

MONTANA'S INFORMATION TECHNOLOGY VISION

The state of Montana and its partners advocate that business needs drive technology and that all partners will be included when implementing information technology solutions.

To support this vision, IT initiatives will be grouped by Communities of Interest to coalesce around business needs and:

- Be customer-focused in providing electronic and traditional access to government services and information;
- Enable its customers to prosper in the global economy through IT solutions;
- Enter into strategic relationships and encourage collaboration at all levels of government to effectively use information technology;
- Meet customers' expectations for reliable and timely delivery of quality services and information;
- Manage and use IT resources efficiently;
- Establish statewide direction for information technology through fiscally responsible and active stewardship.

MONTANA INFORMATION TECHNOLOGY ACT

The Montana Information Technology Act (MITA) defines the state of Montana's policy regarding the use of information technology, the goals of which are:

1. Improve the quality of life of Montana citizens
2. Provide educational opportunities
3. Create quality jobs and a favorable business climate
4. Improve government services
5. Protect individual privacy and the privacy of information contained within IT systems
6. Develop IT resources in an organized, deliberative and cost-effective manner

The following goals, objective, and action items were developed in conjunction with the Information Technology Board (ITB) and the Information Technology Managers Council (ITMC) to address the technology needs of the state and to achieve the goals of MITA.

GOALS, OBJECTIVES AND ACTION ITEMS

GOAL 1: INVOLVE COMMUNITIES OF INTEREST WITH COMMON AND/OR RELATED BUSINESS OBJECTIVES IN INFORMATION TECHNOLOGY STRATEGIC PLANNING.

Communities of Interest include the following broad categories:

- Government Services
- Public Safety
- Human Resources
- Environmental Issues
- Education
- Economic Development
- Cultural Affairs
- Finance

Objective 1-1: Develop IT resources in an organized, deliberative, and cost-effective manner.

Objective 1-2: Utilize IT best practices to implement and manage information technology systems in a coordinated manner inclusive of all units of government with common or related business objectives.

Objective 1-3: Gain economies-of-scale through shared dollars and human resources.

- a. Consolidate project management and oversight where appropriate.
- b. Minimize unnecessary duplication and data errors in similar information technology systems.

Objective 1-4: Coordinate planning, development, and implementation of new information technology resources in conjunction with budget development and approval.

Objective 1-5: Provide stable funding to enable long-term, enterprise-wide investments.

Objective 1-6: Continue to encourage and promote the use of innovative technologies for delivering government services.

Objective 1-7: Implement a Workforce Development Plan to recruit and retain a skilled and properly staffed IT workforce.

Objective 1-8: Improve the quality of life of Montana citizens by improving public safety communications.

Action Items

Information Technology Services Division (ITSD) will:

1. Assist agencies in achieving successful IT projects. (1-1, 1-2, 1-3, 1-4, 1-6)
2. Research and develop statewide strategies for adopting and funding emerging technologies. (1-2, 1-3, 1-4, 1-6)
3. Identify critical enterprise-wide IT projects that require enterprise-wide funding. Integrate the highest priority projects into the alternative IT funding plan. (1-1, 1-3, 1-4, 1-5)

Agencies will:

1. Advocate for their business needs (1-1, 1-2, 1-3)
2. Use structured project management methodologies to manage a project's entire life cycle. Projects will be reviewed at completion to highlight lessons learned and archive project knowledge gained. (1-1, 1-2, 1-3, 1-4, 1-5).
3. Identify and evaluate service opportunities and data access issues from the perspective of both public and private sector costs and benefits. (1-2, 1-6)

GOAL 2: IMPLEMENT COMMON BUSINESS APPLICATIONS AND SHARED SERVICES ACROSS GOVERNMENTAL UNITS.

Shared services include the following broad categories:

- **Security**
- **Records Management**
- **eGov**

Objective 2-1: Share IT resources (including data, information, expertise, and technology) to achieve economies of scale.

Objective 2-2: Reduce unnecessary duplication of similar information technology systems and data management applications.

Objective 2-3: Continue to expand the sharing and using of geographic data in government systems.

Objective 2-4: Continue emphasis on support and maintenance of existing IT infrastructure.

Objective 2-5: Expand eGovernment services and Geographic Information Technology (GIS) services.

Objective 2-6: Expand business continuity and disaster recovery planning.

Objective 2-7: Promote transparency in government.

Action Items

ITSD will:

1. Promote sharing of IT resources (including data, information, expertise, and technology) among state agencies.
2. Require new agency IT applications and systems to consider geographic technology and data as part of the design. (2-3,2-5)

Agencies will:

1. Share geographic data across the enterprise. (2-1, 2-2, 2-3, 2-5)
2. Promote interagency cooperation in implementing new eGovernment services. (2-1, 2-2, 2-4, 2-5, 2-7)
3. Promote interagency cooperation in conducting continuity and disaster recovery planning. (2-1, 2-4, 2-6, 2-7)

GOAL 3: CREATE QUALITY JOBS AND A FAVORABLE BUSINESS CLIMATE.

Objective 3-1: Expand Montana's SummitNet Network

The state will expand its SummitNet telecommunications network. The network will provide all citizens with a service entry point for state eGovernment services, access to public data such as geospatial data and cadastral property data, and provide the education community and local and state governments access to most services available through the Internet.

The state will work with the private sector to promote expanded geographical coverage of its network backbone, including interfaces to private-sector network segments where appropriate.

Action Items

ITSD will:

1. Conduct an assessment to define minimum levels of service, and develop a list of potential users of the network service.
2. Develop a conceptual design describing the opportunities and impact of an expanded network.
3. Work with the private sector to expand the network.

Agencies will:

1. Identify opportunities to improve delivery of public services over a network that meets minimum standards throughout the state.
2. Expand citizen access to public non-confidential data that has economic value.

GOAL 4: PROTECT INDIVIDUAL PRIVACY AND THE PRIVACY OF INFORMATION CONTAINED WITHIN IT SYSTEMS.

Objective 4-1: Improve Enterprise Security and Identity Management

The state will improve interdepartmental coordination, conduct rigorous security assessments, participate in wide ranging security exercises and evaluations, adopt secure architectures, and mitigate security and privacy risks to its systems, infrastructure, and data.

Natural disasters and catastrophic events, as well as attacks against our technology infrastructure and systems, can have a severe impact on the state's operations. The state must work to ensure systems are sufficiently protected and robust to maintain business continuity of state government.

The state possesses significant amounts of personal and confidential information. The risk of disclosure or inappropriate use of that information makes privacy protection a paramount concern. The state's legal obligation to protect the confidential information about its citizens and businesses must be balanced against the public's legal right-to-know, as guaranteed in Montana's Constitution. A primary obligation of the state's IT community is the protection of confidential data from accidental disclosure, theft, and destruction.

An enterprise-wide approach is needed to fund and implement major security projects. The IT security implementation plan will center on IT components: network, servers, applications, and the main data center.

Identity authentication is important when state citizens, businesses, and other customers access state government services and information. The state will establish a common plan for identity authentication solutions to provide secure and authorized access to information for state employees, business partners, and citizens.

Action Items

ITSD will:

1. Implement statewide security policies, standards, and identification tools to help eliminate structural vulnerabilities from the state's IT architecture and systems.
2. Conduct a rigorous administrative review and evaluation of state IT security and recovery programs.
3. Develop a statewide security risk mitigation plan after analyzing available operational recovery readiness information and IT security risks throughout the state.

Agencies will:

1. Implement an Information Security Program.

GLOSSARY

Best Practices	An implemented practice that has been shown to perform optimally through time. As processes and procedures are defined and implemented, patterns can be seen that show the best process and procedure for a business unit, functional area, or type of functionality.
Business Continuity	The sustaining of normal business operations during both expected and unexpected events that would otherwise impair the normal functioning of the state. This involves around-the-clock ability to recover from both manmade and natural disasters and includes assets beyond information technology such as facilities, personnel, critical knowledge, and physical information.
Customer	Citizens, businesses, federal, local, and tribal governments, and other organizations and stakeholders that utilize Montana state services.
eGovernment	The provision of government services via computer or Internet-based technology.
Enterprise	All agencies of the state, including the University system and participating local government and educational entities, working collaboratively to use, share, and leverage the investments made in information technology. To this end, agencies of the state and participating entities share systems and networks, use standard software and hardware, and train employees in common techniques.
Information Technology	Technology, typically in the form of computers, software, networks, telecommunications, electronic storage, etc., that enables the storage, communication, manipulation, and access to information.
Infrastructure	All information technology hardware and software that cumulatively provides a common foundation of equipment and applications that is shared among all entities of the enterprise. Examples: network hardware/software, LAN/WAN, mainframe and mid-tier computer equipment, storage devices, security hardware/software, etc.
Privacy	The right of individuals to keep information pertaining to themselves from being given out to other individuals and businesses.
Project Management	The application of knowledge, skills, tools, and techniques to project activities to meet project requirements.
Security	Measures taken to guard against unauthorized access or use of information and equipment.
Service(s)	A function that provides access to public information, enables business activity, and addresses the needs of state customers.

Stewardship	The careful management of something placed in one's care.
Strategies	Measurable activities to be performed for the purpose of attaining the goals defined in the Integrated Information Technology Strategic Plan.
SummitNet	The state of Montana's high-speed digital data communications network. The next generation of SummitNet will completely integrate voice, video, and data transmission services around the state.
Workforce Development	The recruitment, succession planning, and training plans that focus on ensuring the state has an adequately skilled IT workforce.

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